

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/078,658	02/21/2002	Forrest L. Smith	02940182AA	4757
30743	7590 03/25/2004		EXAMINER	
WHITHAM, CURTIS & CHRISTOFFERSON, P.C. 11491 SUNSET HILLS ROAD			JIANG, SHAOJIA A	
SUITE 340		ART UNIT	PAPER NUMBER	
RESTON, V	/A 20190		1617	
			DATE MAILED: 03/25/2004	1

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)		
	10/078,658	SMITH ET AL.		
Office Action Summary	Examiner	Art Unit		
	Shaojia A Jiang	1617		
The MAILING DATE of this communication Period for Reply	appears on the cover sheet wi	th the correspondence address		
A SHORTENED STATUTORY PERIOD FOR RE THE MAILING DATE OF THIS COMMUNICATIO  - Extensions of time may be available under the provisions of 37 CFF after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a  - If NO period for reply is specified above, the maximum statutory per  - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the material patent term adjustment. See 37 CFR 1.704(b).	PN. R 1.136(a). In no event, however, may a re- reply within the statutory minimum of thirty find will apply and will expire SIX (6) MONT	eply be timely filed  y (30) days will be considered timely. THS from the mailing date of this communication.		
Status				
1) Responsive to communication(s) filed on 30	December 2003.			
2a) This action is <b>FINAL</b> . 2b) This action is non-final.				
3) Since this application is in condition for allow closed in accordance with the practice under the practice under the practice.	wance except for formal matte er Ex parte Quayle, 1935 C.D.	ers, prosecution as to the merits is		
Disposition of Claims	a La parte Quayre, 1000 0.5.	. 11, 400 0.0. 210.		
4)⊠ Claim(s) <u>1-18</u> is/are pending in the applicati	<b>a</b> n			
4a) Of the above claim(s) <u>3,9 and 13-18</u> is/are withdrawn from consideration.				
5) Claim(s) is/are allowed.				
6)⊠ Claim(s) <u>1,2,4-8 and 10-12</u> is/are rejected.				
7) Claim(s) is/are objected to.				
8) Claim(s) are subject to restriction and	d/or election requirement.			
Application Papers				
9)☐ The specification is objected to by the Exami	ner.			
10)☐ The drawing(s) filed on is/are: a)☐ a	ccepted or b) objected to b	y the Examiner.		
Applicant may not request that any objection to the	ne drawing(s) be held in abeyanc	e. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the corre	ection is required if the drawing(s	s) is objected to. See 37 CFR 1.121(d).		
11)☐ The oath or declaration is objected to by the	Examiner. Note the attached	Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119				
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document compared copies of the priority document copies of the certified copies of the priority document copies of the certified copies of the priority document copies of the certified copies of the priority copies of the certified copies of the priority copies of the certified copies of the priority copies of the pri	nts have been received. nts have been received in App iority documents have been re	plication No		
application from the International Bure. * See the attached detailed Office action for a lis	au (PC) Rule 17,2(a)).	and the second		
obstitio diddined detailed office action for a lis	of the certified copies not re	eceived.		
Attachment(s)				
1) Notice of References Cited (PTO-892)	4) 🖂 Interview Com			
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/N	mmary (PTO-413) Mail Date		
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date	8) 5) I Notice of Info	ormal Patent Application (PTO-152)		
S. Patent and Trademork Office	6) Other:	•		

Art Unit: 1617

#### **DETAILED ACTION**

This Office Action is a response to Applicant's response (remarks) filed on December 30, 2003 wherein <u>no</u> claims have been amended.

#### Election/Restrictions

Applicant's affirmation of the telephonic election without traverse of the invention of Group II, Claims 13-18, drawn to composition comprising methanesulfonomide compound and an amide-linked or ester-linked local anesthetic or combinations thereof, and the invention of species ibutilide and bupivacaine, submitted December 30, 2003 is acknowledged.

As recorded in the previous Office Action October 3, 2003, Claims 13-18 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention, and claims 3 and 9 as being drawn to non-elected species.

Claims 1,2, 4-8 and 10-12 are herein examined on the merits in so far as they read on the elected species bupivacaine and ibutilide.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

<sup>(</sup>a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 1617

Claims 1, 2, 4-8, and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sensorcaine with epinephrine entry of the PDR in view of Corevert entry of the PDR for the same reasons of record in the previous Office Action October 3, 2003.

Sensorcaine entry of the PDR teaches a composition employed in a method of inducing local anesthesia. Epinephrine reduces the rate of absorption and peak plasma concentration of bupivacaine, permitting the use of moderately larger total doses and sometimes prolonging the duration of the action. Sensorcaine also teaches that bupivacaine is known to have adverse cardiovascular system reactions such as arrhythmias, cardiac arrest, for example.

Corevert entry of the PDR teaches ibutilide as an antiarrhythmic drug.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate ibutilide in a composition comprising bupivacaine and epinephrine, employed in a method of inducing analgesia.

One of ordinary skill in the art would have been motivated to incorporate ibutilide in a composition comprising bupivacaine and epinephrine, employed in a method of inducing analgesia because bupivacaine has been known to cause systemic cardiovascular effects, e.g., arrhythmia, ventricular fibrillation, cardiac arrest and ibutilide is an agent known for its antiarrhythmic properties.

Therefore the Skilled Artisan would be motivated to incorporate ibutilide into a regimen comprising a composition comprising bupivacaine and

Art Unit: 1617

epinephrine in order to lower the incidence of bupivacaine adverse effects, thereby increasing the potency of bupivacaine.

### Response to Argument

Applicant's remarks filed December 30, 2003 with respect to the rejection made under 35 U.S.C. 103(a) of record in the previous Office Action October 3, 2003 have been fully considered but are not deemed persuasive as to the nonobviousness of the claimed invention over the prior art as further discussed below.

Applicant asserts that "there is absolutely no teaching or suggestion concerning the desirability of co-administering an antiarrythmic agent with a local anesthetic". The examiner acknowledged that the cited prior art does not expressly disclose the incorporation of ibutilide in a composition comprising bupivacaine and epinephrine, employed in a method of inducing analgesia. That was why the rejection is made under 35 U.S.C. 103(a) for obviousness over the prior art, but not under 35 U.S.C. 102(b) for anticipation. As discussed in the previous Office Action, one of ordinary skill in the art would have been motivated to incorporate ibutilide in a composition comprising bupivacaine and epinephrine, employed in a method of inducing analgesia because bupivacaine has been known to cause systemic cardiovascular effects, e.g., arrhythmia, ventricular fibrillation, cardiac arrest, and more importantly, <u>ibutilide is an agent known for its antiarrhythmic properties</u>. Hence, the motivation to employ a known antiarrhythmic agent, iburilide herein is seen.

Art Unit: 1617

Applicant's testing data of the working examples shown in Table 1-3 of the specification at pages 14-16 herein have been fully considered but are not deemed persuasive as to the nonobviousness and/or unexpected results of the claimed invention over the prior art since Table 1-3 merely demonstrates the particular agents, Ibultilide or sotalol (the only two particular methanesulfonamide compounds) in the particular amount, enhancing the local anesthetic potency of bupivacaine (the only one particular amide-linked or ester linked local anesthetic agent) in the particular amount, containing 1:200,000 epinephrine in a composition within the instant claims. Thus, the evidence in the examples is also not commensurate in scope with the claimed invention and does not demonstrate criticality of a claimed range of any methanesulfonamide compounds and any amide-linked or ester linked local anesthetic agents, encompassed in the claims herein, and any possible amounts of these agents to be administered for increasing the potency of local anesthetic. See MPEP § 716.02(d).

Moreover, note that the specification provides no side-by-side comparison with the closest prior art in support of nonobviousness for the instant claimed invention over the prior art. Note that arguments of counsel cannot take the place of factually supported objective evidence. See, e.g., In re Huang, 100 F.3d 135,139-40, 40 USPQ2d 1685, 1689 (Fed. Cir. 1996); In re De Blauwe, 736 F.2d 699, 705, 222 USPQ 191, 196 (Fed. Cir. 1984).

Art Unit: 1617

Therefore, the evidence presented in specification herein is not seen to be <u>clear and convincing</u> in support the nonobviousness of the instant claimed invention over the prior art.

For the above stated reasons, said claims are properly rejected under 35 U.S.C. 103(a). Therefore, said rejection is adhered to.

It is merely noted for the record that the recitation "<u>E4031</u>" in claims 6 and 12 renders the claim(s) unclear as to "E4031" encompassed by the claims.

In view of the rejections to the pending claims set forth above, no claims are allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Jiang, whose telephone number is

Art Unit: 1617

(571)272-0627. The examiner can normally be reached on Monday-Friday from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan, Ph.D., can be reached on (571)272-0629. The fax phone number for the organization where this application or proceeding is assigned is 703.872.9307.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is

(703) 305-1235.

S. Anna Jiang, Ph.D.

Patent Examiner, AU 1617

March 9, 2004

Page 7